

A Cowbird came into the nest tree while the female was in the nest, sneaked to the nest opening and looked in. What she saw was evidently not reassuring as she quickly backed away and flew off.

A squirrel crossing the glade was vigorously attacked and made to scamper for refuge to the nearest tree. Once safely there he turned and expressed his opinion of the Great Crest in shrill and violent language.

The most vicious performance which I witnessed was an attack on an immature Bronzed Grackle. He blundered into the nest tree while the male was sitting on one of the topmost branches, and had hardly settled himself when he was struck a violent blow from behind and sent sprawling to the ground. He lay there squawking for a few moments and then started to fly away. Hardly had he lifted himself from the ground when another blow on the back of the head caused him to turn a complete somersault into a small bush. He crawled out on the side opposite the nest and flew away without being further molested. The Great Crest used both beak and wings in the attack and the second blow took several feathers out of the grackle's head.

A TWO-YEAR NESTING RECORD IN LAKE COUNTY, ILL.

BY COLIN CAMPBELL SANBORN AND WALTER A. GOELITZ.

(Photographs by Walter A. Goelitz.)

Lake County lies on Lake Michigan in the north-east corner of Illinois. That part of Lake County in which the following records were made, extends along Lake Michigan from the Illinois-Winconsin state line at the north, to the Cook County line on the south, and west about ten miles to the Des Plaines River, and in the northern portion, farther west to the McHenry County line. This territory may be divided into five separate tracts: (1), the sand dunes and marshes of Beach in the the north-east corner; (2), the bluffs

and ravines extending along the lake; (3), the Skokie Valley Slough, about two miles west of the lake, with its adjoining woods and fields; (4), the heavily timbered region in the Des Plaines River Valley, about six miles west of the Skokie; (5), and the prairie and lake country west of the Des Plaines River.

A very good description of Beach may be found in the "Auk," volume XXIV, number 2, in "Ornithological Conditions in Northeastern Illinois, with Notes on Some Winter Birds," by the late John Farwell Ferry. In the marshes of this region were found the Bitterns, Rails, Blackbirds, and Green Herons, and among the dunes, the Sparrows.

Along the shores of Lake Michigan extends a bluff, cut every mile or so by a ravine. It is, in some places, just a clay or sand bank inhabited by Bank Swallows and Kingfishers, while in other places it is covered by brush and a few trees. The beach varies in width from seventy-five feet to none at all. Most of this bluff property is occupied by residences, but in some places there are still fields, small groves of trees, and woods. In the brushy fields and groves the Yellow Warbler, Redstart, Wood Pewee, Towhee, Goldfinch, and Red-eyed Vireo nest, and in the thicker woods there are many Crows and a few Hawks.

The Skokie Valley Slough, which lies to the west, extends south from about the middle of the county, where it is only a few feet wide, to the county line, where it is more than a mile wide. Here in the Marsh proper were found the Bitterns, Rails, Red-winged Blackbird, Long-billed Marsh Wren, and Swamp Sparrow. In the fields and woods on either side there are Green Herons, Sparrow Hawks, Maryland Yellowthroats, Marsh Hawks, and the Sparrows.

Farther west is the Des Plaines River Valley, which region is heavily wooded. The Des Plaines River runs south the entire length of the county and is about eight or nine miles from the lake. It was here that we found most of our Hawks' nests, besides innumerable Crows' nests. Most of our trips to this region were made in the early spring.



Cedar Waxwing nest. Lake Co., Ill. W. A. Goelitz.

The land west of the Des Plaines River is mostly prairie, dotted here and there with small lakes, or a small patch of woodland. In this open country are Prairie Chicken, Killdeer, Black Tern, and many Vesper Sparrows.

Robins, Bluebirds, Woodpeckers, House Wrens, Brown Thrashers, Catbirds, and Blue Jays can be found anywhere where there is a suitable nesting site. Meadowlarks, Bobolinks, Song and Field Sparrows are in every field. Cedar Waxwings, Goldfinches, and a few Cuckoos can be found in brushy fields and second growths. At a small lake, Butler's Lake, were found the Yellow-headed Blackbird, Coot, Mallard, Pied-billed Grebe, and Florida Gallinule. These birds could not be found nesting anywhere else.

NOTE:—The numbers at the end of each paragraph represent the number of nests of each variety found, with eggs or young, in the two years.

1. Pied-billed Grebe (*Podilymbus podiceps*), July 2nd, 1915. Nest with seven eggs found at Butler's Lake. Merely a floating mass of decaying reeds. Situated in a thin growth of cat-tails. 2.

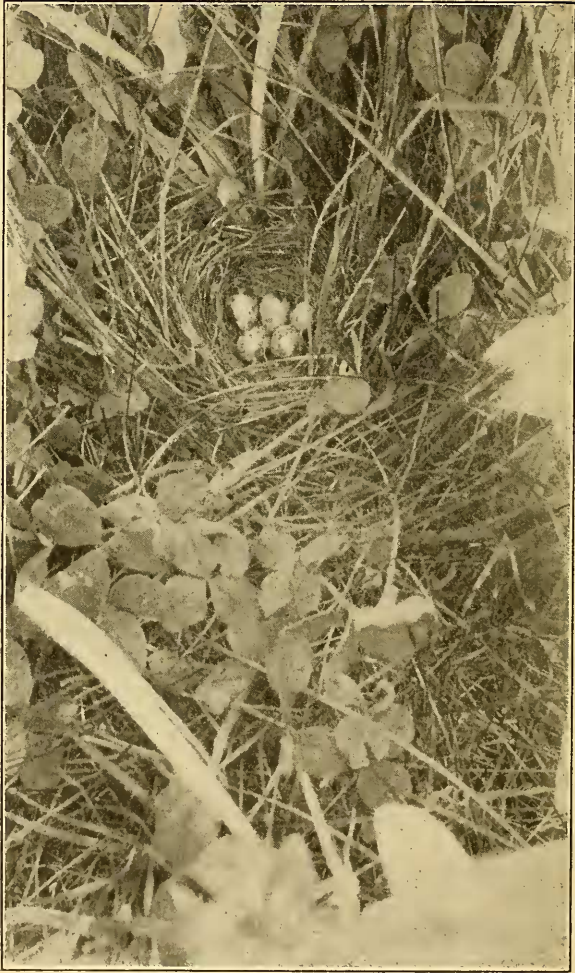
2. Black Tern (*Hydrochelidon nigra surinamensis*), July 2nd, 1915. Two sets of three eggs found at Butler's Lake. Nests were mats of reeds located among the cat-tails near the shore. The nests were easily found by the actions of the old birds when closely approached. 5.

3. Mallard (*Anas platyrhynchos*), July 2nd, 1915. The only nesting record we have, is a female and ten downy young, seen on a small lake in northwestern Lake County.

4. American Bittern (*Botaurus lentiginosus*), May 30th, 1914. On this date, a female was flushed from a nest containing four eggs. It was a platform of matted reeds over a foot of water, along the edge of the Skokie Marsh, just west of Highland Park. 4.

5. Least Bittern (*Ixobrychus exilis*), July 8th, 1915. Nest and five eggs at Butler's Lake, situated in a bed of dead reeds along the shore. Other nests, found at Beach on June 7th, 1914, with four eggs, and in the Skokie Marsh, on June 13th, 1915, also with four eggs. This bird is not as abundant in the extensive Skokie Marsh as at Beach and Butler's Lake. 12.

6. Green Heron (*Butorides v. virescens*), June 2nd, 1915. Nest at Beach in clump of willow trees. Made entirely of dead willow twigs and contained five eggs. We have been told that a pair of



Bobolink nest. Lake Co., Ill. W. A. Goelitz.

Black-crowned Night Herons formerly nested in this exact location. 2.

7. King Rail (*Rallus elegans*), May 19th, 1914. Nest with set of twelve eggs located in Skokie Marsh, five feet from a ditch of running water, and a hundred feet from a public road. Other dates May 23rd, 1914, eleven eggs; June 7th, twelve eggs; June 13th, 1915, two nests with eleven eggs each. 7.

8. Virginia Rail (*Rallus virginianus*), June 14th, 1914. The only nest found was in a small slough in the middle of a field. A small platform of reeds with two eggs. This bird and also Sora is very common during migrations, but is rarely seen in the summer.

9. Florida Gallinule (*Gallinula galeata*), July 2nd, 1915, a set of nine eggs, just hatching, and on July 8th, a set of four eggs, also hatching, were found at Butler's Lake. The females were flushed from both nests, which were masses of floating reeds. 2.

10. Coot (*Fulica americana*), July 8th, 1915. Many Coots seen on a small lake, but only one nest found. It was in a small open area, among the reeds along the shore, and held three eggs.

11. American Woodcock (*Philohela minor*), May 5th, 1914. Nest in the woods at Ravinia about 100 feet from a house, and seventy-five feet from an electric and a steam road. It was a slight depression at the base of a small tree in a bed of moss, lined with a few dead leaves. On May 6th, the nest was again visited—the eggs had hatched and the young gone. The Woodcock seems to be becoming more common in Lake County. 4.

12. Prairie Hen (*Tympanuchus a. americanus*), May 22nd, 1915. While visiting on a farm in the prairie country, a farmer showed us two nests of this rare bird containing 12 and 14 eggs respectively. They were in a hay-field a half mile from his barn, and a quarter mile apart. One bird flushed readily, while the other could almost be touched before leaving. The nest with 12 eggs was destroyed, but the other hatched safely. 2.

13. Mourning Dove (*Zenaidura macroura carolinensis*), May 22nd, 1915. A nest composed of a few sticks and containing two eggs was found on an island in the middle of Cedar Lake. 4.

14. Marsh Hawk (*Circus hudsonius*), May 18th, 1914. A set of five eggs found in a patch of weeds on dry ground in Skokie Marsh. Nest composed wholly of weed stems to form a pad about five inches thick. The same pair, supposedly, nested here this year, but the nest was flooded by a three days' raise of water.

15. Cooper's Hawk (*Accipiter cooperi*), May 9th, 1915. A nest was found on this date with one egg. On the seventeenth of May it held four eggs, and on the next visit on June 17th, two of the eggs were just hatching. The nest was about 45 feet up in a red



King Rail nest. Lake Co., Ill. W. A. Goelitz.

oak, and was built of sticks on top of an old crow's nest, and was lined with a few pieces of bark. 5.

16. Red-shouldered Hawk (*Buteo l. lineatus*). This is our most common hawk. We found eleven nests with eggs in two years. Earliest date for eggs is April 6th, and latest is May 21st. In climbing to these nests we were attacked only once.

17. Sparrow Hawk (*Falco s. sparverius*). May 8th, 1914, a nest containing five eggs was found about 20 feet up in a dead stub along the edge of a field. On May 19th, 1915, four eggs were taken from this same stub. There was a bluebird's nest above the cavity occupied by the hawks. On the 29th of June the cavity was occupied by a set of Flicker eggs. 4.

18. Screech Owl (*Otus a. asio*). May 20th, 1914, a nest containing two bad eggs and one young bird was found in a natural cavity in a red oak. The tree was in the front yard of a home in the center of Highland Park. 1.

19. Yellow-billed Cuckoo (*Coccyzus a. americanus*), July 26th, 1915. Nest was nine feet up on a horizontal branch of a Hawthorn tree. When the nest was first found, it contained one egg, and was so thin that the egg could be seen through the bottom. On the 26th the nest held a full set of three eggs, and was much thicker than when first found, showing that eggs are sometimes laid before the nests are completed, and also that the laying of an egg does not stop the birds from completing the nest. Made of twigs and grass. 2.

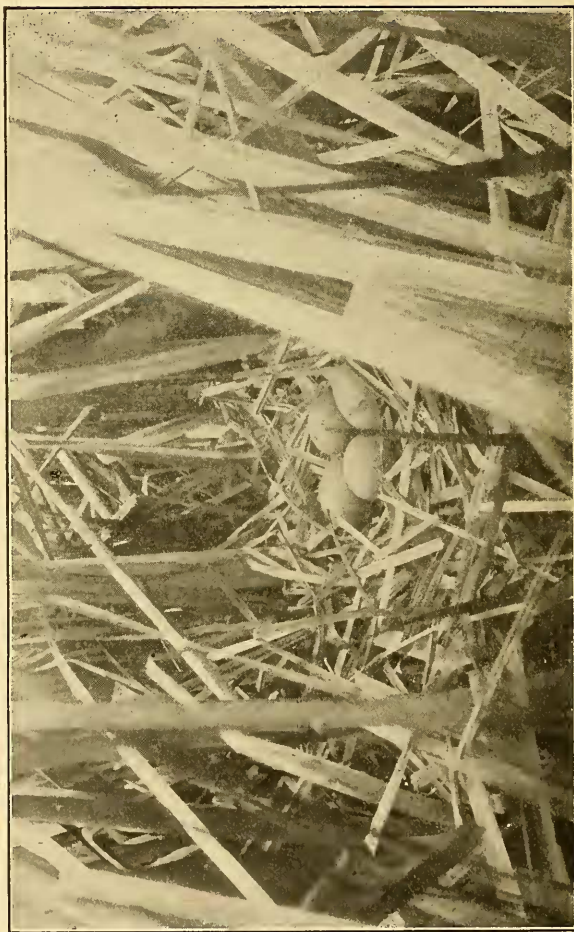
20. Black-billed Cuckoo (*Coccyzus erythrophthalmus*), August 10th, 1914. A nest was found in oak scrub, about four feet up, and contained two young, which were about half grown. The nest was a conical structure of twigs lined with a thick pad of oak leaves. A few years ago a nest was found containing three eggs of the Black-bill and one of the Yellow-bill. 4.

21. Belted Kingfisher (*Ceryle alcyon*). The only nest of this bird found was destroyed by the slumping of the bluff along the lake during a heavy rain.

22. Downy Woodpecker (*Dryobates pubescens medianus*), June 10th, 1915. Two young just out of the nest, were found on the ground at Ravinia. The Downy is rather an uncommon summer resident in Lake County.

23. Red-headed Woodpecker (*Melanerpes erthrocephalus*), June 7th, 1914. Set of five eggs found in hickory stub in vacant lot between two houses. A queer set, with one runt, one normal, and one extra large egg was found on May 25th, 1914.

24. Northern Flicker (*Colaptes auratus luteus*), June 12th, 1915. A large set of 12 eggs, one of which was a runt, was found on



Bittern nest. Lake Co., Ill. W. A. Goelitz.

this date at Beach. The nest was about twenty feet up in a pine stub. Besides this two large sets of ten have been found in former years. 10.

25. Chimney Swift (*Chætura pelagica*), June 22nd, 1915. Nest and five eggs found about four feet down in a chimney. The female would not leave the chimney, but remained clinging below the nest. 4.

26. Ruby-throated Hummingbird (*Archilochus colubris*), June 25th, 1915. Nest about 35 feet up in white oak tree. Six feet above it was a Redstart's nest with two eggs. Nest made of plant down, and covered on the outside with lichens. On the 23rd the nest limb was cut off at the trunk, but as the nest contained only one egg, the limb was wedged tightly between two branches and when revisited on the 25th the female was found sitting on two eggs, despite the fact that the nest had been moved three feet. 1.

27. Kingbird (*Tyrannus tyrannus*), June 10th, 1914. Three eggs were found in a nest in the top of apple tree. The nest was made mostly of grass. Another nest was found on a horizontal oak limb, which also had three eggs. 6.

28. Crested Flycatcher (*Myiarchus crinitus*), June 2nd, 1915. The only nest we have been able to locate, although this bird is common throughout the county, was in a natural cavity forty feet up in the broken top of a red oak. The three eggs were stained yellow as if there had been a fourth egg which had been broken. The nest contained the usual piece of snake skin.

29. Phoebe (*Sayornis phæbe*), May 4th, 1914. Nest composed of moss, grass, and mud, plastered on a jagged rock in culvert. Five eggs. This nest was collected and then the birds succeeded in raising two broods. They nest in this culvert every year. 10.

30. Wood Pewee (*Myiochanes virens*), June 28th, 1915. Thirty-two feet up in the horizontal crotch of a white oak, a nest was found; made of grass and covered with lichens and cobwebs. It contained three eggs. 12.

31. Blue Jay (*Cyanocitta c. cristata*), June 15th, 1915. While searching for a Migrant Shrike nest, we found this Blue Jay nest, which held six eggs, about ten feet up in a hawthorn tree. Another set of six eggs was found May 2nd, 1914, in a thick cedar tree. 25.

32. American Crow (*Corvus b. brachyrhynchos*), April 9th, 1915. A nest was found in a leaning oak tree, made of sticks, grass, and horse hair, and held the rather unusual number of seven eggs. At least fifty nests found in two years.

33. Bobolink (*Dolichonyx oryzivorus*). On June 2nd, 1914, we found a dark chocolate colored set of six eggs in a nest of grass,

lined with horse hair, and placed on the ground at the base of a clump of clover. On June 12th, 1915, another nest containing six light gray eggs was found. 10.

34. Cowbird (*Molothrus a. ater*), May 14th, 1914. A Towhee nest found on this date, contained one Towhee egg and eight Cowbird eggs. About fifty of the nests found during 1914 and 1915 held Cowbird eggs.

35. Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*), July 2nd, 1915. The only nesting colony of these birds found is at Butler's Lake, where on this date, a nest with four eggs was found. It was composed of dead marsh grass, woven about several reeds to form a basket. 7.

36. Red-winged Blackbird (*Agelaius p. phænicus*), May 23rd, 1914. A colony of thirty pairs was located in a small slough just off the Skokie Marsh. On June 5th, 1915, a nest was found which held five badly incubated eggs. At least 200 nests of this very abundant bird have been found.

37. Meadowlark (*Sturnella m. magna*), May 5th, 1914. Nest and six eggs found in the Skokie Valley. All nests found here have had the entrance on the south side. 8.

38. Baltimore Oriole (*Icterus galbula*), June 5th, 1914. A nest containing young was found in a maple tree 20 feet up, along a roadside. Another nest was seen while being built, on May 23rd, 1915. 4.

39. Bronzed Grackle (*Quiscalus quiscula æneus*), May 23rd, 1915. On an island in Cedar Lake were found nine nests, all of which contained young. Eleven nests were found on this island last year. 20.

40. English Sparrow (*Passer domesticus*). One nest on May 14th, 1915, held six eggs and was built in a cavity in an oak tree, from which they had driven a pair of Bluebirds.

41. Goldfinch (*Astragalinus t. tristis*), August 27th, 1915. Nest in a sumach bush in a brushy field, containing six eggs. It was made of fine grass and thistle-down, woven very compactly together. Earliest date for eggs July 21st, and latest September 2nd. 30.

42. Vesper Sparrow (*Poæcetes g. gramineus*), July 16th, 1914. In the corner of a bunker on the Old Elm Golf course, a nest with four eggs was found. Although many players passed here daily, these eggs hatched safely. 3.

43. Chipping Sparrow (*Spizella p. passerina*), June 12th, 1915. This bird is very uncommon in Lake County, so we were very much surprised to find three nests at Beach. One held three

young, and the others, three and four eggs respectively. A number of old nests were also found.

44. Field Sparrow (*Spizella p. pusilla*), May 9th, 1915. A female was flushed from a nest and four eggs, in a small hawthorn bush six inches from the ground. A rather late date for eggs of this bird is August 14th, when a nest with one fresh egg was found. 7.

45. Song Sparrow (*Melospiza m. melodia*), May 30th, 1914. Nest containing 5 eggs and one Cowbird egg was seen in a bed of dead weeds along the Skokie Marsh. Late date: nest and four eggs July 20th, 1915. This and the former are, outside of the English, our two most common sparrows. 6.

46. Swamp Sparrow (*Melospiza georgiana*), June 11th, 1915. Five eggs. Nest composed entirely of grass and deeply hollowed, situated in dead cat-tails about one foot above the ground. These birds are very plentiful in the Skokie Marsh, and their nests are extremely hard to find. 11.

47. Towhee (*Pipilo e. erythrophthalmus*), August 9th, 1914. We found this nest while looking for Waxwings. It was two feet up in a clump of hazel bushes, and held three eggs. We have noticed that the early nests are placed on the ground, while the later ones are always elevated. 5.

48. Cardinal (*Cardinalis c. cardinalis*), June 10th, 1914. Nest in elderberry bush, about six feet up, containing three eggs. About five years ago, a pair of Cardinals appeared in Highland Park, and since then, they have been increasing so that now there are at least five pairs breeding here every year.

49. Rose-breasted Grosbeak (*Zamelodia ludoviciana*), May 18th, 1914. The only nest of this bird found was in a hawthorn tree ten feet up. It contained three eggs and two Cowbird eggs. These birds are scarce in this locality.

50. Indigo Bunting (*Passerina cyanea*), July 26th, 1915. Nest one foot above the ground in a clump of weeds beside a field of wheat, containing three badly incubated eggs. A scarce bird most years in Lake County. 2.

51. Scarlet Tanager (*Piranga erythromelas*), July 17th, 1914. This bird is about as common as the Rose-breasted Grosbeak. The one nest found was on the end of an oak branch, and held three eggs.

52. Purple Martin (*Progne s. subis*), July 15th, 1915. There were both fresh eggs and young birds, ready to fly, in a house, which we examined today. There are many colonies of these birds about here, and they take very quickly to the houses put up for them.

53. Cliff Swallow (*Petrochelidon lunifrons*). The only colony which we have discovered in Lake county is on a barn a few miles west of Highland Park. The birds were fairly common here five or six years ago, but the English Sparrows are rapidly driving them away.

54. Barn Swallow (*Hirundo erythrogastra*), June 12th, 1915. Of the many colonies found, the most interesting was in a lumber shed near Waukegan. We counted twenty-five new nests and as many old ones. A set of six eggs was found here.

55. Tree Swallow (*Iridoprocne bicolor*), May 23rd, 1915. Two nests were found on this date: one of which contained one egg, and one which was being built. The birds have come to our attention only lately, and have been found to be more common in open country to the west than along the lake. At all nests the birds showed no signs of fear. 4.

56. Bank Swallow (*Riparia riparia*), June 2nd, 1914. At this date only incomplete sets were found in a large nesting colony of these birds in the bluff near Lake Forest, where they have nested, to our knowledge, for the last ten years or more. There are about 150 pairs in this colony.

57. Cedar Waxwing (*Bombycilla cedrorum*), July 26th, 1915. A nest found at Ravinia on this date contained six eggs. They breed very commonly here in brushy situations. Other dates are two sets of five each on August 2nd, 1915, and two other sets of five on August 4th, 1915.

58. Red-eyed Vireo (*Vireosylva olivacea*), June 17th, 1914. Nest found in thick wood on edge of Skodie Marsh in fork of witch-hazel bush, and contained three young and one Cowbird. This was the only nest we found where the young hatched. All the others were deserted because of the Cowbird eggs laid in them.

59. Warbling Vireo (*Vireosylva g. gilva*), July 2nd, 1915. We first met with this bird on May 23rd, 1915, when it was heard singing. Not recognizing the song, we hunted the bird out with some difficulty, and found this Vireo. On July 2nd, 1915, while visiting at the same place, we were shown a Vireo's nest, about 35 feet up in an oak tree, which proved to be a Warbling Vireo's nest, and held one young bird, just ready to fly. About a mile from here a bird was heard singing a number of times, but no nest was found.

60. Yellow-Warbler (*Dendroica a. aestiva*). On June 13th, 1915, two nests were found with four eggs each. These birds are very abundant breeders in the brushy fields along the lake bluff and the Skokie Marsh. This warbler, the Redstart, and the vireos seem to be imposed upon by the Cowbird more than the other birds. 12.

61. Oven-bird (*Seiurus aurocapillus*). We have been unable to find a nest of this bird, although they are common enough in the deep, damp woods throughout the county. On June 29th, 1915, however, we were attracted by the distress cries of a pair of Oven-birds, and found the cause to be a snake which had eaten one young bird and was getting ready to catch another which was perched on a nearby bush. The nest from which they had flown could not be found.

62. Maryland Yellow-throat (*Geothlypis t. trichas*), June 17th, 1915. Nest situated on dry ground in bed of weeds; made of grass, lined with horse hair, and contained five eggs. Another nest with three eggs and two Cowbird eggs, was placed six inches above a foot and a half of water in some cat-tails. The Yellow-throat is abundant throughout the Skokie Marsh, but the nests are rather difficult to locate in the deep grass. 3.

63. Redstart (*Setophaga ruticilla*), June 22nd, 1915. A nest with three eggs was found in some hazel bushes along a well traveled road. It was about six feet up, and could easily be reached from a wagon on the road. This warbler nests commonly in Lake County, and places its nest anywhere from three to forty feet above the ground. 9.

64. Catbird (*Dumetella carolinensis*), June 9th, 1915. A set of five eggs was found about three feet up in some thick brush; nest of twigs lined with weeds and grass. Another set of five was found three years ago. This is a very common bird in this locality.

65. Brown Thrasher (*Toxostoma rufum*), May 22nd, 1914. A nest located on the ground in a patch of may apples held five eggs. In our experiences, sets of five have been very common in the last two years.

66. House Wren (*Troglodytes a. aëdon*), June 3rd, 1914. A bird house placed in a front yard held seven eggs on this date. They nest very commonly in houses put up for them. 12.

67. Long-billed Marsh Wren (*Telmatodytes p. palustris*), June 15th, 1915. In the middle of the Skokie Marsh on this date we found a nest of the usual globular shaped construction of cat-tails, which contained seven eggs. This wren is very abundant in all the marshes. On June 12th, 1915, out of the fifty nests examined on Beach, only ten contained eggs. 25.

68. Chickadee (*Penthestes a. atricapillus*), May 15th, 1914. A nest with two eggs was found in a stump two feet above the ground. Many holes are partly excavated or even lined with feathers or hair every spring, but rarely any eggs are laid.

69. Wood Thrush (*Hylocichla mustelina*), May 30th, 1914. Two nests, each about eight feet up in saplings, on the edge of the Sko-

kie Marsh, held four eggs and one Cowbird each on this date. The Wood Thrush is a fairly common breeder around here. 6.

70. Robin (*Planesticus m. migratorius*), May 8th, 1914. Nest with four eggs. Very common breeder. 25.

71. Bluebird (*Sialia s. sialis*). One pair of birds laid three sets of five eggs on the following dates, in the same place, when they were robbed: May 4th, May 19th, and June 27th, 1914.

THE CHRONICLE OF A TAME OLIVE-BACKED THRUSH.

BY CORDELIA J. STANWOOD.

One day while following a trail through the woods that lead to a boiling spring, I came upon the nest of an Olive-backed Thrush in a low fir. The bird was lining it with dead leaves. The following day the nest was completed, and in due time the bird was brooding four beautiful green-blue eggs, speckled with golden-brown. I visited the nest when it was time for the young to appear and found four nestlings. When the young would be about ten days old (July 10, 1909) I started for the spring once more, both hope and fear contending in my soul. The nest was more or less exposed. The nestling bird has many foes.

Although I made good time, it seemed as if my feet were weighted with lead, so doubtful was I of the sequel. When I actually beheld four sturdy young Thrushes in the nest I could scarcely believe that what I had been anticipating so long had actually come true.

In order to learn as much as possible about the Olive-backed Thrush, I had planned to take a young Thrush home for a time, if I were so fortunate as to obtain one. The nestlings were already standing to strengthen the legs, as young Thrushes and Robins do at times, one or two days before leaving the nest. It seemed wise to leave my Thrush in the nest as long as practicable. Still there was every indication of a storm. The nest was more than a mile from home. If I did not secure a nestling at once, it seemed doubtful if I